

its spacious tidal basins and large floating docks are completed, there will be every advantage which a port can possess afforded to the shipping which carries on the eastern commerce of the country. Even at present the harbour of Grimsby affords shelter to a large traffic; the natural advantages have already rendered it an extensive port, and the floating docks, although not on a large scale, are oftentimes full of ships, chiefly from foreign countries.

Mr. Rendel is the engineer-in-chief, and Mr. Adam Smith, the resident engineer.

At the lunch which followed the ceremony of laying the first stone on the 18th, the Earl of Yarborough, who presided, said in the course of his speech, "Perhaps strangers may not be aware of the enormous quantity of timber necessary to construct these docks. That timber has been imported from the Baltic. We have succeeded, though it was prognosticated that we could not, in shutting out the water as you have seen to day, and we may consider it fortunate, as I believe we are at this moment 19 feet below the level of the water. The first pile of this timber was driven in 1846, and I recollect that it was stated in a neighbouring port that there was an end of the Grimsby docks. It was said that when the first pile got tapped on the head by the engine it went through the quicksand, and was no where to be found. But it was a mistake, for since that time the coffer-dam has been extended to the length of 1,600 feet, and to construct it there have been obtained 70,000 pieces of Memel timber, of the average length of 50 feet. The measurement of these works is in circuit a mile and three quarters."

We may probably lay before our readers a notice of some of the peculiarities observable in the construction of these docks.

"WONDERS IN LOCOMOTION: NEW MOTIVE POWER."

In this age of spanking locomotives, such an announcement as that now quoted from the columns of a contemporary is, to say the least of it, somewhat startling. Yet it turns out that the "new motive power" by which these wonders are to be accomplished is by no means very new, even as a motive power; and although the author of the announcement, "Adolph Count de Wardinsky," intimates that this new motive power has been patented, he will find, by reference to No. 330, Vol. V. of THE BUILDER, that even that fact is not very new, the same power, or "patented ingredient," having been patented in this country, by Mr. Fox Talbot, as a motive power, previous to 3rd July, 1847. In short, this great discovery consists in the use of gun-cotton, xylidine, pyroxyline, or whatever it is to be called, as a motive power. Amongst various modes of adapting it, says the Count, it may be applied directly under the piston, and fired by electricity, so as to supersede the necessity of boiler, furnace, or other cumbrous apparatus. Such is the very nature and description of Mr. Fox Talbot's patent. The explosive material is supplied by a tubular slide under the piston, and that portion of it which protrudes or is pressed through the slide into the piston is to be fired by a platinum wire, thrust through the cylinder,—xylidine, it appears, having the peculiar and invaluable property of exploding only when and where not under pressure. The Count is hopeful that this new patent will be applied even to street cars, old ladies' Bath chairs, and dandy's velocipedes, far less to omnibuses and mail-coaches, or common-road locomotives in general,—the economy of it being, as his remarks, enormous, when it is considered—that "all kinds of vegetable fibres or lignine, such as cotton, flax, hemp, tow, sawdust, straw, hay, rags, paper, &c., can be rendered explosive by their being merely dipped for eleven to fifteen minutes in nitric acid, strengthened by an admixture of an equal quantity of sulphuric acid, then well washed in water, and dried for about two hours,"—and that "for an engine of two-horse power [thus supplied (see *Manchester Examiner* of 6th March, 1847) at New Jersey] a thread not larger in size than ladies' sewing cotton is quite sufficient." But not only so: for although "small and compact xylidine engines are easily attachable to

carriages, street cabs, tradesmen's cars, farmers' waggons, dandy's velocipedes, or old ladies' Bath chairs," the Count tells us that since writing the above he has "made a further discovery, and this last one is verging almost on a miracle"—the most prominent of its features being, that not even engines are necessary! far less boilers, "steam, fire, water, magnetism, air, or animal power;" so that if "a thread not larger in size than ladies' sewing cotton" be quite sufficient to propel with a power equivalent to a couple of horses, and without even an engine, we are likely to see Pusch's ingenious idea of propelling "old ladies" with gun cotton "stay laces" briskly drawn through "pie holes," and even without Bath chairs, any more than engines, in one sense realised, or more than realised, indeed, by all the difference between the power of a cotton thread and that of a stay lace. Moreover, by the same wonderful means—or want rather of apparently adequate means, ships may be propelled "without paddles, or any propellers whatever,"—pyroxyline, as the naked "propeller" itself, we presume, excepted. After all this, it is useless urging the objection already started, that the gaseous proceeds of gun cotton may corrode the pistons of engines; the Count does not even admit that. But, however ultra-enthusiastic he may be in hopes which themselves remind one of the like, heretofore entertained as to other expansive forces, that wonders may yet be excusably anticipated from the compaction of such forces into forms so convenient as those of which gun cotton is capable, can scarcely be denied, when it is considered, that while, in a simple and most economical way, "all the vegetable fibres in the creation become highly explosive," they nevertheless remain perfectly tractable and manageable by mere matting compression.

NOTES IN THE PROVINCES.

THE foundation-stone of the new buildings for the Farm School at Redstone-hill, Reigate, for the reformation of juvenile offenders intrusted to the care of the Philanthropic Society, was laid by H. R. H. Prince Albert on Monday last. The new buildings will accommodate 120 boys, besides 50 in the old farm buildings: an increase to 500 is expected in a few years. A chapel and school-room are to be built.—St. Lawrence's Church, Winchester, is being re-opened, after a closure of nine months, during which a new east stained-glass window has been put up, at a cost of 900*l.*, by Miss Littlehale; the old pews have been replaced by others, and the old flat ceiling taken down, and the roof timbers thrown open.—Upwards of 1,300*l.* have been subscribed for the repewing and other restoration of the ancient church of St. Martin, Salisbury. Two of the principal windows, stopped up some years since, are also to be re-opened, and the spire is to be partly rebuilt, and other improvements effected.—An infirmary chapel is to be built at Worcester, at an outlay of 1,200*l.*, partly obtained (300*l.*) from the Jenny Lind fund, and from a subscription list headed by 100*l.* from the dean.—The foundation-stone of the Cheltenham Church of England Training Institution was laid by Lord Ashley on Thursday week before last.—Thornbury Church was to be re-opened on the 1st inst. It has been new roofed, new pewed, new clerestory windows put in, the gallery removed, the interior of the tower restored, and the west window thrown open to view. The floor of the chancel has been relaid with encaustic tiles, and a five-light decorated east window, by Mr. George Rogers, of Worcester, inserted. The architect employed was Mr. F. Niblett, of Gloucester; and the contracting builder, Mr. John Brown, of Bristol.—The new church of Upton, parish of Tormoham, Torquay, lately consecrated, accommodates about 1,000 persons. All the seats are open. The style of the building is Early English, and the material, grey lime-stone, with wrought quoins-stones and carved work and dressings of Caen stone. The elevation is massive, consisting of a nave and aisles, with circular chancel, and the foundation of a tower and spire for the complete design. Total length of interior, with chancel, 120 feet; breadth, 60 feet; height, 70 feet. The chancel and west windows are decorated. A row of

circular pillars runs between the aisles and nave.—The lower compartment of the Phoenix tower at Chester is being put into a state of repair.—At Chowbent, a locality not long since notorious for barbarous usages, a mechanics' institute has just been opened, with a lecture by Dr. Hodgson.—Miss Sharpe, of London, has presented additional decorations for the completion of the two chancel windows of the church at Tibshelf.—A public subscription has been announced to be made for repairing the roof of Honiton Church, at an estimated cost of 900*l.*—one-half of which has been contributed, chiefly by the parishioners.—On 24th ult. the foundation of the new congregational church at Leamington was laid.—A corn exchange is about to be established at Dumfries.—Nine new churches are to be erected at Glasgow, and 6,000*l.* have been subscribed for the purpose.—The foundation stone of Patrington and Bridge new schools was laid on Friday, the 27th ult., by the Dowager Marchioness of Conyngham. Mr. Hezekiah Marshall is the architect.

THE OLD WATER-COLOUR SOCIETY.

THE current exhibition of the Society of Painters in Water Colours contains 365 pictures (one for every day in the year), and is as a whole one of the most perfect annual collections ever seen. The sales have been proportionably great, the blue ticket meets the eye in every direction.

Prout, Copley Fielding, Garsneau, D. Cox, P. De Wint, G. Fripp, Frederick Taylor, J. M. Wright, V. Bartholomew, F. Markesie, W. Hunt, have all done their best, and the picture-loving public know well what that is. Cattermole has several small works of great excellence,—amongst them "The Exhortation" (283), and "The Goldenrule" (329), may be pointed out as two of the most perfect things in the room. Oakley has fallen into a manner (the one fault with many of the members), and will need an effort to retrieve himself.

Amongst the seceders from the new society, J. J. Jenkins appears to have made the greatest advance upon his former productions. Topham has several charming drawings,—but, to our mind, less so than some of his previous admirable works. Duncan is, as usual, excellent. Branwhite's 193, "On the East Lyn, North Devon," is a wonderful piece of distemper painting.

Mrs. H. Criddle, who has but recently turned her attention to water colours, exhibits several pictures of considerable promise and power, and will be found an acquisition.

LAUNDRY DRYING CLOSETS.

GRAT attention being now called to the subject of drying clothes and linen, in consequence of the number of public laundries and asylums requiring improved means of effecting that object, I am induced to trouble you with a few remarks, which I trust may be considered of public interest.

It has always been a received opinion (and very justly), that a current of pure fresh air is an important part of the process of drying, but which would appear from the remarks of Mr. Jenkes in your last number to be unnecessary. I have recently erected two very powerful drying closets at the Surrey County Lunatic Asylum, one 20 feet long, 15 feet wide, and 10 feet high; the other 20 feet long, 10 feet wide, and 10 feet high. In each of these a temperature of 230 degrees can be easily attained. Mr. Jenkes's closet, according to his statement, contains 336 cubic feet of space: the smallest of mine is equal to 2,000 cubic feet, and the largest 3,000 cubic feet of space. The usual working temperature of these two large closets is 180 degrees with ventilation constantly going on. I should judge the reason Mr. Jenkes's closet does not dry satisfactorily with ventilation, is on account of deficiency of power in the heating apparatus, as with each of mine there is at least 144 inches area of ventilation always acting, notwithstanding the high temperature maintained.

WM. HEALY.

* Many of the drawings are bought by dealers to sell again.